

# **Energy Report Out Slides**

Presented To: Community Resilience Panel

Date: November 9, 2015





### **Gaps and Needs in Sector**

- What are the largest gaps and needs within your sector that need to be addressed in resilience planning and guidance products?
  - Need to address:
    - Power restoration communication
    - Communicating with utility companies
    - Avoiding problems before they happen
    - Situation assessment and mutual aid
    - Regulatory reform
  - Major gaps:
    - Reliability standards ignore major events
    - Cyber and physical security are huge concerns
  - NOTE: We don't want additional planning documents.
- Identify significant interdependencies and gaps with other sectors that impact resilience.
  - Key interdependencies: Communication, transportation, social (policy)
  - Key interdependency gaps: regulatory reforms, emergency communications, credentialing





### How do we solve the problems?

- How do we address the needs and gaps we identified?
  - Need more detailed gap analysis with end game in sight where we can develop specific requirements to affect policy, standards, guidelines, and best practices
  - Use cases and case studies
- Are there others we need to engage to help us address these needs? Others may include SMEs/groups not at the meeting in your sector or SMEs/groups from other sectors.
  - NARUC, NASEO
  - Director of Utility Variable Integration Group (UVIG)
  - NERC CIPC
  - Local government officials and municipally-owned utilities





## **Existing Guidance/Ongoing Efforts for Resilience in Sector**

- What are existing codes, standards, guidance, goals, and/or protocol that have been published, or are in-process, in your respective sectors?
  - Many references are already in the guide. See the guide for a starting point.





### **BACKUP SLIDES**





#### **Gaps and Needs in Sector**

- What are the largest gaps and needs within your sector that need to be addressed in resilience planning and guidance products?
  - Power restoration communication:
    - If you are out, how long can you last?
    - When do I get my power restored?
    - Who is getting power back?
      Some crawlers (Eagle Eye as an example) look for outage information and disseminate to public.
  - Reliability standards ignore major events.
    - What metrics do we need to capture for these types of events?
  - Cyber and physical security are huge concerns.
    - How do we protect ourselves from adaptive threats?
  - Utility communications:
    - Most local communities struggle to get clear communications from the utility.
  - Avoiding problems before they happen.
    - How do you take lessons learned from prior disasters?
    - How do you get the right people in a room together to talk things through?





### Gaps and Needs in Sector (cont.)

- Identify significant interdependencies and gaps with other sectors that impact resilience.
  - Situation assessment and mutual aid:
    - Public safety doesn't share information with utilities preventing utility crews from accessing damaged areas.
    - How do you identify people who ARE allowed to come into damaged locations? How do you ensure they are properly credentialed?
    - When you bring in utility crews from outside, how do you let those utilities know what tools to bring (not everything is compatible)? Mutual aid agreements need to include several pieces of information to make the agreements effective. How do you dispatch them the utilities through a mutual aid agreement?
    - There is no such thing as a cyber security mutual aid agreement. What happens if bad guys get on the wire and you need mutual assistance?
  - No additional planning documents
    - Make sure whatever we do not add yet another planning document to the workload.
  - Regulatory reform
    - Resiliency costs money, which needs a different regulatory model that allows rate recovery for resilience investments.
    - 30-year technology amortization schedules do not fit the rapid technology changes happening on the grid.

